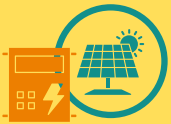


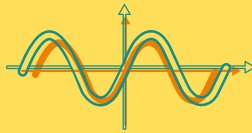
Livsol MPPT Inbuilt lithium battery solar inverters are technically smart, advanced and innovative solar inverters, that give you peace of mind with uninterrupted power supply. This inverter is DSP based pure sine wave and user-friendly LCD display and this is 30% more efficient than usual Inverter's. Livsol Inbuilt lithium battery solar inverter provides higher power saving when it is powered by Livsol high quality solar panels. This inverter charges batteries at even low input voltage up to 90V. PCU comes with 88% efficiency and all protections, assures you to enjoy continuous power during extended power cuts also. Changeover time is less than 10ms, so there is no need for separate power backup systems for your power equipment and computers.

KEY FEATURES

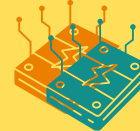
- Bigger Display with more data
- Built-in Energy Meter
- Maximized Solar Usage through Intelligent modes.
- 40% less panel required than other PCU
- RS-232 (Industrial Standard MODBUS)
- Incorporated with Microchip and ST DSP Engines
- Safety and Protections
- IGBT based design and Fast Charging Wide range MPPT Input
- 6 Stage Battery Charging
- Multiple Battery Selection
- Sleek & Aesthetic design
- Works as standalone Solar Inverter in case of No-Grid



**TECHNOLOGICAL
SMART SOLAR INVERTER**



**ADVANCE DSP
SINEWAVE**



**INBUILT LITHIUM
POWER BACKUP**



**BATTERY LIFE
10-12 YEARS**



Technical Specifications

Parameters	Unit	Rating			
		L-ION1500MT	L-ION2500MT	L-ION3500MT	L-ION5500MT
Model name (Name Plate)					
System rating		1KVA	2KVA	3KVA	5KVA
Operating DC Voltage	Volts	12.8	25.6	51.2	48
SPV Parameters					
SPV Open Circuit Voltage Range(Min-Max)	Volts	18-50	36-100	72-180	72-180
Max SPV Power	KW	1	1.6	3	4
Compatible SPV Panels		36/60/72cell			
MPPT Based Charge Controller					
Switching Element		MOSFET			
Controller		DSP			
Efficiency		>95%			
Battery Charging Stage		5 (Softstart, Boost, Absorbion, Float, Equalise)			
Battery					
Battery Type (Inbuilt)		Lithium Ion (LFP)			
	AH	60	54	42	100
Full Load Input Current ±2A	Amp	63	63	52	80
Operating DC voltage	V	12.8	25.6	51.2	48
Input voltage max Voc	Vdc	25	45	90	90
Maximum Solar array power	Wp	660	1340	2680	4000
Switching element in SCC		MOSFET			
Type of control		Micro			
Type of solar charger		MPPT			
Max current rating of SCC	Adc		40.0	50.0	50.0
Efficiency of MPP tracking	%	NA	NA		
Efficiency of SCC	%	>90	>90		
Switching element in Inverter		MOSFET			
Type of Control		MPPT			
Nominal Output voltage in inverter mode	Vac	220V ± 7V			
Output supply phases		single			
Nominal Output Frequency of Inverter	Hz	50 ± 1			
Frequency (Min - Max during Grid by pass) UPS mode	Hz	47-53			
Frequency (Min - Max during Grid by pass) Inverter mode	Hz	40-60			
Output voltage regulation	%	180-220			
Output THD (v) at linear load	%	<5%			
Creast Factor		03:01			
Overload capacity 125%	Sec	6 (6 Retry)			
Overload capacity 150%	Sec	2 (6 Retry)			
Cooling Fan ON at temp	°C	60 (or 45% of rated Load or Solar I>15A)			
Cooling Fan Off at temp	°C	55 (or 40% of rated Load or Solar I<15A)			
Peak efficiency of inverter	%	< 82			
Battery low voltage alarm per battery	Vdc	11.0 ± 0.2			
Battery low voltage cut per battery	Vdc	10.8 ± 0.2 (With 4 Retry)			
Batter low cut recovery per battery through Solar	Vdc	12.7 ± 0.2 (or Mains or reset swich on front panel)			
Max Battery charging voltage by grid	Vdc	14.4 ± 0.2	28.8 ± 0.4	57.6 ± 0.8	54 ± 0.8
Max Battery charging current by grid	Adc	15A ± 2A		14A ± 2A	20A ± 2A
Max Battery charging voltage by Solar per battery	Vdc	14.3 ± 0.2			
Battery High cut with Alarm per battery	Vdc	15.0 ± 0.2			
Battery High cut Recovery per battery	Vdc	14.6 ± 0.2			
Max Battery charging current by Solar	Adc	15 ± 2A	14 ± 2A	20 ± 2A	
Max Charging current to battery by Solar+Grid	Adc	15 ± 2A	14 ± 2A	20 ± 2A	
Grid low cut voltage (IT load/Normal load)	Vac	180/100 ± 10			
Grid low cut voltage recovery (IT load/Normal load)	Vac	190/110 ± 10			

Grid high cut voltage (IT load/Normal load)	Vac	265/280 ± 10			
Grid high cut voltage recovery (IT load/Normal load)	Vac	255/270 ± 10			
Grid charging Enable/Disable		yes			
Selection of UPS Load/Normal Load		yes			
Selection of Operating Mode		<p>HC-Charging current = 15A ±1A Solar + Mains till battery boost voltage with maximum Solar Sharing. System will not be disconnect Grid in any case</p> <p>EC-Charging current= 15A ±1A Solar + Mains till boost voltage, System will cut off the mains when battery voltage reaches boost voltage level and output load is transferred to Solar + Battery and Grid reconnected</p> <p><=11.8V/11.2V per Battery(1KVA/2KVA) & 11.5V For 3KVA</p>			
Input current at no load at Nominal Battery voltage	Adc	< 2			
Noise @ 1 meter	dB	<50			
Protections		Overload, Battery Deep discharge,Battery Overcharge,Short circuit(1retry),Battery Hi,PV Reverse,Over Temp,Fuse/MCB Trip,battery reverse.			
LCD Display parameters		<p>PV Current, Battery voltage, Mains voltage, UPS ON/OFF, UPS Mode, Symbol of sun (Smily) if solar available, (non smily symbol in absence of solar), Load percentage (0 to 150%), over load, short ckt, fault, battery low, over temp, PV reverse, Fuse trip, (Customised LCD)</p>		<p>PV Current, Battery voltage, Mains voltage, UPS ON/OFF, UPS Mode, Load percentage (0 to 150%), over load, short ckt, fault, battery low, over temp, PV reverse, Fuse trip, (16X2 LCD)</p>	
Indication LEDs		Tact switch Status		NA	
Operating Temperature range	°C	0-50			
Storage Temperature range	°C	0 +65			
Max RH	%	95			
Front panel details (Display, Selection switch etc)		Display with tact switch		Display with switches	
Enclosure protection		IP20			
Changeover time in UPS mode	ms	<10			
Changeover time in Normal mode (Inv mode)	ms	<40			
Mains connection		3 core copper cable size 0.75sqmm, 1 .5mtr length w/o TOP		Terminal Block 30Amp	
Output		3pin Universal socket 13A		Terminal Block 30Amp	
MCB in battery path		Yes			
Fuse in Solar Path		Rated Fuse		Rated MCB	
Input Protection		Resettable Circuit breaker		Rated MCB	
Backup @ 400Watt Load	Hrs	2.00 -2.15	3.3-3.45	5.2	12
Weight without Packing	Kg	20	26	53	65
Dimension (LXWXH) without Packing	MM	530x450x230	530x450x230	500x360x925	<p>510X450X600</p> <p>* Battery weight and dimation extra (Battery will be separate)</p>

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